

REMARKS

Claims 1-39 are pending. Claims 27-39 are withdrawn pursuant to the Examiner's previous restriction requirement.

The Examiner rejected Claims 1-26 under 35 U.S.C. § 102(e) as being unpatentable over U.S. Patent Application Publication 2004/127,240 ("Li"). With respect to independent Claims 1, 8, 17 and 22, the Examiner states:

Regarding claim 1 Li teaches a method of enabling channel scanning in a wireless station, said method comprising (figs. 1-7):

receiving from an access point data related to a possibility of regulatory domain change (para. # 0047-0048,0052-0055,0063,0073-0075, fig, 7); and

selecting a channel scanning method based upon said data (para. # 0047-0048,0052-0055,0063,0073-0075).

\* \* \*

Regarding claim 8 Li teaches a method of enabling channel scanning in a wireless station, said method comprising (figs. 1-7):

establishing communication between said wireless station and an access point (para. # 0047-0048,0052-0055,0063,0073-0075); receiving information in a lifetime field related to a period of time during which regulatory domain information could be used after the communication between said wireless station and said access point has been lost (para. # 0047-0048,0052-0055,0063,0073-0075); and determining whether an elapsed period of time after the communication between said wireless station and said access point has been lost is greater than the period of time in said lifetime field (para. # 0047-0048,0052-0055,0063,0073-0075).

\* \* \*

Regarding claim 17 Li teaches a wireless station adapted to scan for channels in a wireless communication network, said wireless station comprising (figs. 1-7):

a receiver for receiving a data block, wherein said data

block comprises a regulatory domain change pre-alert field (para. # 0047-0048,0052-0055,0063,0073-0075); a controller coupled to said receiver, said controller selecting a channel scanning method based upon data in said domain change pre-alert field (para. # 0047-0048,0052-0055,0063,0073-0075); and a transmitter coupled to said controller (para. # 0047-0048,0052-0055,0063,0073-0075).

\* \* \*

Regarding claim 22 Li teaches a wireless station adapted to scan for channels in a wireless communication network, said wireless station comprising (figs. 1-7):

a receiver for receiving a data block, wherein said data block comprises a lifetime field related to the extent of a regulatory domain (para. # 0047-0048,0052-0055,0063,0073-0075); a controller coupled to said receiver, said controller selecting a channel scanning method based upon data in said lifetime field; and a transmitter coupled to said controller (para. # 0047-0048,0052-0055,0063,0073-0075).

Applicants respectfully traverse the Examiner's rejection. Independent Claims 1, 8, and 17 and 22 each recite selecting a scanning method based on data (e.g., a pre-alert field or a lifetime field) that indicates a possible regulatory domain change:

1. A method of enabling channel scanning in a wireless station, said method comprising:

receiving from an access point data provided to indicate a possibility of a regulatory domain change;  
and,

after a connection with the access point is terminated, selecting a channel scanning method based upon said data.

\* \* \*

8. A method of enabling channel scanning in a wireless station, said method comprising:

establishing communication between said wireless station and an access point;

receiving information in a lifetime field provided to indicate a period of time during which regulatory domain information could be used after the

communication between said wireless station and said access point has been lost; and

determining whether an elapsed period of time after the communication between said wireless station and said access point has been lost is greater than the period of time in said lifetime field.

\* \* \*

17. A wireless station adapted to scan for channels in a wireless communication network, said wireless station comprising:

a receiver for receiving a data block, wherein said data block comprises a regulatory domain change pre-alert field;

a controller coupled to said receiver, said controller selecting a channel scanning method based upon data in said regulatory domain change pre-alert field; and

a transmitter coupled to said controller.

\* \* \*

22. (Previously presented) A wireless station adapted to scan for channels in a wireless communication network, said wireless station comprising:

a receiver for receiving a data block, wherein said data block comprises a lifetime field related to the extent of a regulatory domain;

a controller coupled to said receiver, said controller selecting a channel scanning method based upon data in said lifetime field; and

a transmitter coupled to said controller.

Li neither discloses nor suggests providing such data from an access point. In contrast, at page 5, paragraph [0060], Li teaches inferring an “implicit regulatory domain” from characteristics detected from the channel or a “conformance test limit”:

[0060] If any information element is detected, then the client product can determine whether the beacon includes an implicit regulatory domain in step 506. Deriving an implicit

regulatory domain is possible when the channel on which a beacon is received corresponds to only one known regulatory domain and/or conformance test limit. To determine this correspondence, certain characteristics of the beacon can be analyzed. One such characteristic is the frequency of the beacon.

Such inference would fail if there is any reallocation of carrier frequencies or changes in power limits in the regulatory domain, as Li's method depends on the fortuitous side effects of the channel characteristics and conformance test limits (i.e., Li relies on data that are not intended to indicate a possibility of regulatory domain change). At page 7, paragraph [0072], Li further teaches to rely on previously determined regulatory domain information stored in the non-volatile memory:

FIG. 7 illustrates one embodiment of a process flow that can be used by a client product if that client product has already been through an initial startup, as determined in step 701. If it is not an initial startup, then the client product can determine whether a regulatory domain has been set in step 702. If not, then the client product can return to step 302 (described above), wherein a passive scan can be performed at all frequencies at intervals of N ms. If a regulatory domain is set, then the client product can temporarily assume that that regulatory domain and any other information stored in the non-volatile memory is correct.

Li's reliance of regulatory domain information in the non-volatile memory may result in non-conformance to regulations, if the information is incorrect or if circumstances have changed such that the information is no longer correct, as discussed in Li's paragraphs [0075-0076]. The problem is particularly acute when the mobile unit is at the border between regulatory domains, or crosses such regulatory boundaries frequently. In contrast, using information regarding possible change in regulatory domain expressly provided by an access point (e.g., a pre-alert or a lifetime value), as recited in Applicants' Claims 1, 8, 17 and 22, Li's problem of reusing erroneous regulatory domain information is avoided. Thus, Applicants submit that Claims 1, 8, 17 and 22 are each allowable over Li.

With respect to Claim 14, the Examiner states:

Regarding claim 14 Li teaches a method of enabling channel scanning in a wireless station, said method comprising (figs. 1-7): determining if a channel of a plurality of available channels is a domain-independent channel; and actively scanning the domain-independent channel (para. # 0047-0048,0052-0055,0063,0073-0075).

Applicants respectfully traverse the Examiner's rejection. Claim 14 recites active scanning after a domain-independent channel is detected:

14. A method of enabling channel scanning in a wireless station, said method comprising:

determining if a channel of a plurality of available channels is a domain-independent channel; and

actively scanning the domain-independent channel.

In contrast, at page 6, paragraphs [0072]-[0073], Li teaches using an active scan only when a specific regulatory domain (i.e., not a domain-independent channel) is detected:

[0072] FIG. 7 illustrates one embodiment of a process flow that can be used by a client product if that client product has already been through an initial startup, as determined in step 701. If it is not an initial startup, then the client product can determine whether a regulatory domain has been set in step 702. If not, then the client product can return to step 302 (described above), wherein a passive scan can be performed at all frequencies at intervals of N ms. If a regulatory domain is set, then the client product can temporarily assume that that regulatory domain and any other information stored in the non-volatile memory is correct.

[0073] In step 705, the client product can determine whether an active scan is acceptable in that regulatory domain. In an active scan, the client product can go to each known frequency and send out a probe (i.e. a signal asking "Who's there?"). Because an AP can quickly respond to such a probe, an active scan generally can establish a network significantly faster than a passive scan in which the client product must wait to detect a beacon from an AP. If an active scan is not acceptable, then the client product can perform a passive scan in

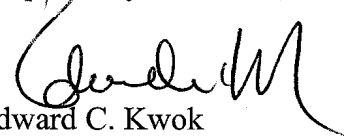
step 706. On the other hand, if acceptable, then the client product can perform an active scan in step 707. Note that the scans of steps 706 and 707 can be performed in either the infrastructure or ad hoc modes, as controlled by the stored information

Thus, Applicants respectfully submit that Li neither discloses nor suggests the domain-independent channel recited in Applicants' Claim 14. Accordingly, Claim 14 is allowable over Li.

Therefore, Applicants respectfully request reconsideration and allowance of Claims 1, 8, 14, 17 and 22, and their respective dependent Claims 2-7, 9-13, 15-16, 18-21 and 23-26.

All claims (i.e., Claims 1-26) are therefore allowable. If the Examiner has any question regarding the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicant at (408)-392-9250.

Respectfully submitted,



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